CLAIMS

We claim:

1. A disease prognosis prediction modeling method for preparing a model for predicting the prognosis of a specified disease from clinical laboratory test

5 values for the disease by means of a computer, the method comprising the steps of:

inputting a plurality of actually measured clinical laboratory test values for the disease and actual measured values of the prognoses into the computer;

processing these values by a data mining method to determine one or a

10 plurality of clinical laboratory test items which have an influence on the prognosis of the disease;

determining a priority of the items with respect to the prognosis in a case where there are a plurality of the items; and

establishing a judgment routine in which correlation of the plurality of clinical

15 laboratory test items and the clinical laboratory test value ranges of the test items with the predicted value of the prognosis is stipulated on the basis of the priority,

wherein the judgment routine is used as the model.

2. The disease prognosis prediction modeling method according to Claim 1,

20 wherein the judgment routine is a decision tree in which a plurality of chance nodes are taken as the clinical laboratory test items and the clinical laboratory test measurement value ranges, and a plurality of prognosis prediction values corresponding to the chance nodes are taken as terminal nodes.

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3. A method for predicting the prognosis of a disease from a disease name and the plurality of clinical laboratory test measurement values on the basis of the judgment routine according to claim 1 or claim 2.

5   4. A disease prognosis prediction method for predicting the prognosis of the disease from clinical laboratory test data using a computer, the method comprising the steps of:

storing the judgment routine according to claim 1 or 2 in a computer;

inputting a name of the disease which is an object of the prognosis

10   prediction and clinical laboratory test measurement values for the disease into the computer; and

determining a predicted value of the prognosis of the disease using the input values on the basis of the judgment routine.

15   5. A disease prognosis prediction device which predicts the prognosis of the disease from clinical laboratory test values, and which comprises a computer, wherein the computer comprises a memory that stores the judgment routine according to Claim 1 or 2; input means that inputs a name of the disease which is an object of the prognosis prediction and clinical laboratory test measurement

20   values for the disease; prognosis prediction value acquisition means that determines the prognosis prediction value for the disease by applying the input values to the judgment routine; and display processing means that displays the prognosis prediction value thereon.

25   6. A computer program which causes a computer to execute the respective means according to claim 5, and which is readable by the computer.

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7. A storage medium in which the program according to claim 6 is stored.

8. The method according to claim 2, wherein the disease comprises a liver disease, and the clinical laboratory test item with the highest priority comprises PIVKA.

9. The method according to claim 3 or 4, wherein the judgment routine is a decision tree in which a plurality of chance nodes are taken as the clinical laboratory test items and clinical laboratory test measurement value ranges, and a plurality of prognosis prediction values corresponding to the chance nodes are taken as terminal nodes.

10. The method according to claim 9, wherein the chance nodes of the decision tree comprises patient information.

11. A data group which forms the decision tree according to claim 2.

12. A method for predicting a prognosis relating to a disease of a certain patient from test values for current clinical test items for the disease of the patient by means of a model in which statistical processing is performed on the basis of the relationship between test results, which relate to a plurality of patients, obtained for a clinical test item indicating the disease, and the actual prognoses of the disease for the respective patients.

13. The method according to claim 12, wherein the clinical test item relates to PIVKA.

14. The method according to claim 1 or 4, wherein the priority of the clinical test items is determined each time in the process of the judgment routine.

15. The method according to claim 1 or 4, wherein the disease relates to a liver disease, and the highest chance node is set at a critical value relating to the clinical test value of PIVKA.

16. The method according to claim 13, wherein PIVKA reference value is set for each year of survival years when survival predictions in which PIVKA is the node with the highest priority are performed on the basis of the model for each year of survival years.